

Mock Scanner Policy of Florida State University Magnetic Resonance Imaging Facility

INTRODUCTION

The FSU Magnetic Resonance Imaging Facility is equipped with an MRI Simulator from <u>Psychology Software Tools</u>. The purpose of this device is to allow researchers to familiarize their research subjects with the scanner environment prior to undergoing an actual MRI session. The goal is to enable researchers to acquire more high-quality data with reduced motion contamination, and to identify other issues that can cause the failure of actual MRI sessions due to, for example, previously unknown claustrophobia and anxiety.

The mock scanner includes an electrically operated table, realistic head coil, fans, lights, and can produce realistic scanner noises. Moreover, it includes a system for training subjects to remain as motion-less as possible while in the scanner. This is accomplished through the use of motion-related feedback to the subject.

BOOKINGS AND CANCELLATIONS

Bookings for the mock scanner are managed through the FSU MRIF Project and Booking management system [insert URL here]. The shortest permissible booking is 30 mins. Thereafter, booking times may be further increased in 15 min increments. When cancelling bookings, please ensure that you cancel any parking reservations that you have made in order to facilitate your subject's access to the MRIF.

Cost

At present, there is no cost to reserve and use the mock scanner.

MOCK SCANNER TRAINING

Only those researchers who have completed MRIF safety training and completed a 30 mins hands-on training session on the mock scanner may operate it. The mock scanner manual is available at [insert URL here]. Please print and bring a copy of it when you are attending training. To schedule training please email [insert email address here].

TECHNICAL PROBLEMS

If you experience any technical problems with the mock scanner please bring them to the attention of MRIF staff immediately by using the report problem link for the mock scanner in the MRIF Project and Booking management system [insert URL here].

IRB APPROVAL

As with any experimental procedure, IRB approval is required to use the mock scanner with your subjects. Its use should be described in your description of experimental procedures to the IRB and in all consent and assent documents. The following language is suggested for IRB applications and consent documents:

PROPOSED IRB APPLICATION LANGUAGE

The proposed subject population [briefly describe population here; e.g., children, autistic individuals, substance users] may have problems remaining sufficiently still for the duration of an MRI study to produce high-quality data. Prior to their actual MRI scan session, we will use a realistic MRI simulator to increase compliance and reduce the amount of data lost due to motion contamination. Located at the Florida State University Magnetic Resonance Imaging Facility, the simulator is realistic facsimile of an MRI scanner and accurately replicates the look, feel and sound of the real scanner environment. In addition to being able to practice tasks in the mock scanner, subjects will be trained to remain still through the use of real-time motion-related feedback. The mock scanner training session take approximately 30 – 45 minutes.

PROPOSED CONSENT DOCUMENT LANGUAGE

You will be asked to participate in a preliminary training session at the Florida State University Magnetic Resonance Imaging Facility. This training session will take place in a mock MRI scanner. The mock scanner will look, feel and sound like a genuine scanner but it is not a real scanner. The purpose of this session is to familiarize you with the scanner environment, to train you on the task and to help you stay as still as possible for the duration of the real MRI scanning session. This training session will take approximately 30 – 45 minutes.

Though not provide here, the consent language should be converted into age-appropriate assent language and included in your application to the IRB, if needed.